

THURSDAY, JULY 22, 2004

Building 402 - Gallery

7:00 Continental Breakfast

Building 401 – Conference Room A1100

8:00 System Studies Robert Hill (ANL)
*Strategies for Transitioning to Advanced
Fuel Cycles and Reactor Systems*

9:00 Breakout Sessions

Student Track

Students will participate in small-group problem-solving, exploring aspects of future nuclear power, including cost, safety, waste, nonproliferation, risk and public perception.

Faculty Track

Faculty will meet with ANL management and key staff to discuss options for future collaborations, internships for students and other partnerships and outreach.

11:00 Presentations from Small Groups (10 min/group)

12:00 Box Lunch and Close-Out

Enabling Our Energy Security through the Nuclear Fuel Cycle

Workshop for Graduate Students from the
Big Ten Nuclear Engineering Departments

***Hosted by
Argonne National Laboratory (ANL)***

Co-sponsored by
Exelon Corporation
Westinghouse Electric Company
Nuclear Management Company
American Electric Power
U.S. Department of Energy (DOE), Office of Nuclear
Energy, Science and Technology

The workshop will provide an overview of government research into advanced nuclear fuel cycle systems and the role of that research in achieving sustainable nuclear power. The students will be introduced, through lectures, interactive tours and small group activities, to leading-edge technologies for each phase of the nuclear fuel cycle and for cross-cutting areas such as non-proliferation, nuclear materials, advanced computing, and radioactive waste management. In a special session on the first day of the workshop, representatives from the government, industry and universities will provide their perspectives on the transition from today's nuclear power base (light-water reactors with a once-through fuel cycle) to advanced systems. Students will have the opportunity to share their views and talk personally with the invited guests.

Argonne National Laboratory
Operated by The University of Chicago
for the U.S. Department of Energy, Office of Science



WORKSHOP PROGRAM

TUESDAY, JULY 20, 2004

Building 402 - Gallery

11:30 Lunch and Discussions with Invited Guests

Building 402 - Auditorium

12:30 Welcome and Introductory Remarks Don Joyce
(Deputy Laboratory Director, Argonne National Laboratory)

1:00 *Future Role of Nuclear Power* Michael Sellman
(CEO, Nuclear Management Company)

1:45 *DOE's Nuclear Programs –* William Magwood
Bridging Today with the Future
(Director, Office of Nuclear Energy, Science and Technology,
U.S. Department of Energy; DOE/NE)

2:30 *Today's Solution to the Nuclear Waste Issue* Paul Dickman
(Senior Technical Policy Advisor, Office of Civilian Radioactive
Waste Management, U.S. Department of Energy; DOE/OCRWM)

3:15 Break
Group Photo (Students and Faculty Guests)

3:30 Panel Discussion Moderated by Michael Corradini
(Chair, Engineering Physics, University of Wisconsin-Madison)

Panelists: William Magwood (Director, DOE/NE)
Paul Dickman (Senior Policy Advisor, DOE-OCRWM)
John Goosen (Director, Science and Technology Department,
Westinghouse Electric Company)
Amir Shakarami (Vice-President of Engineering, Exelon Nuclear)
Gary Holahan (Executive Assistant for Reactors and Research, Office
of the Chairman, U.S. Nuclear Regulatory Commission)
Jim Tulenko (Professor of Nuclear and Radiological Engineering,
University of Florida, American Nuclear Society President)

Enablers to the Future of Nuclear Power and Advanced Nuclear Systems
Questions to Panelists:

1. Summarize the perceptions of your field regarding the critical enablers to future nuclear power.
2. What societal, regulatory and environmental conditions and R&D solutions do you see as important to the commercial viability and transition to advanced nuclear systems and fuel cycles?
3. What role do you believe today's nuclear engineering students could have in enabling the future of nuclear power?

Building 460 - Argonne Guest House

6:00 Dinner and Discussions with Invited Guests

7:30 *Nuclear Shipments through the Decades* Jack Edlow
(President, Edlow International)

WEDNESDAY, JULY 21, 2004

Building 402 - Gallery

7:00 Continental Breakfast

Building 401 - Conference Room A1100

TUTORIALS

8:00 Advanced Fuels Mitchell Meyer (ANL)

8:45 Reactor Design Temitope Taiwo (ANL)

9:30 Separations Monica Regalbuto (ANL)

10:15 *Break*

10:30 Radioactive Waste Management Robert Finch (ANL)

11:15 Nonproliferation James Morman (ANL)

12:00 *Lunch - Gallery*

TOURS

1:00 Laboratories and facilities — Nuclear Fuel Cycle, Nuclear Materials,
Advanced Computing, Hydrogen

Building 401 - Conference Room A1100

4:30 *Small Modular Reactors and Their Role* David Wade (ANL)
in Sustainable Development

Building 460 - Argonne Guest House

6:00 Dinner